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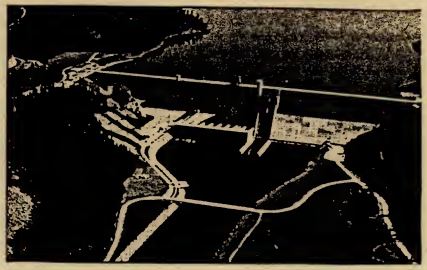
WILDLIFE MITIGATION PROGRAM



ANNUAL REPORT

FY94

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WILDLIFE MITIGATION PROGRAM

ANNUAL REPORT

FY94

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Introduction

Two units of the Columbia River Hydroelectric system, Libby and Hungry Horse dams, occur in western Montana. Together these dams flooded over 50,000 acres of prime wildlife habitats (Yde and Olsen 1984, Casey et al 1984). An additional 2,100 acres of productive habitats were lost due to activities associated with hydroelectric development including road and railroad relocations and new road construction. The Northwest Power Act of 1980 established the Northwest Power Planning Council and charged it with developing a program to protect, mitigate and enhance fish and wildlife and habitat affected by hydroelectric development. Montana's wildlife mitigation program was developed following procedures established by the Council.

In December 1988, the State of Montana, Montana Fish, Wildlife & Parks, and Bonneville Power Administration signed the Wildlife Mitigation Agreement for Libby and Hungry Horse Dams (Settlement Agreement). This agreement established a trust account which would be used to finance wildlife mitigation projects.

The wildlife mitigation program is being implemented under the guidance of a five-year operating plan (Nyberg 1992). Three mitigation projects were underway in FY94: the Libby Habitat Enhancement Project, the Hungry Horse Habitat Enhancement Project and the Habitat Protection Project. This report summarizes activities completed during the period July 1, 1993 through September 30, 1994.

WILDLIFE AND WILDLIFE HABITAT LOSSES

The process used to determine wildlife and wildlife habitat losses at Libby and Hungry Horse dams was described in earlier reports (Yde and Olsen 1984 and Casey et al 1984, respectively). These reports identified the loss of 52,600 acres of productive wildlife habitats (Table 1). Most of the current effort is aimed at providing replacement habitats similar to those lost by enhancing National Forest lands adjacent to the reservoirs. We are also evaluating the effects of that work on key wildlife species or groups of species.

Table 1. Acres of Habitat Mapping Units included in the loss estimates for Libby and Hungry Horse Dams, Montana (Casey et al 1984 and Yde and Olsen 1984, respectively).

Habitat Mapping Unit	Hungry Horse	Libby	Total
Aquatic			
River/Stream	702	3,285	3,987
Pond/Lake	54		54
Marsh/Slough	147	29	176
Total Aquatic Habitats	903	3,314	4,217
Terrestrial			
Gravel Bar	532	955	1,487
Upland Grasslands	634	1,583	2,217
Upland Shrub	5,713	159	5,872
Riparian Habitats			
Deciduous Shrub Riparian	1,077	667	1,744
Deciduous Tree Riparian	100	873	973
Mixed Riparian Forest	3,619	2,511	6,130
Sub-irrigated Grassland	179	3,404	3,583
Total Riparian	4,975	7,455	12,430
Coniferous Forest			
Warm, Dry Conifer		7,159	7,159
Cool/Dry Douglas Fir		448	448
Cool/Moist Douglas Fir		5,143	5,143
Cold/Dry Subalpine Conifer		60	60
Warm/Moist Conifer		2,149	2,149
Dense Seral LPP Forest	229		229
Old Growth Coniferous Forest	568		568
Unspecified Conifer Forest	10,126		10,216
Total Conifers	10,923	14,959	25,882
Talus/Eroded Slopes	70	16	86
Developments		409	409
TOTAL	23,750	28,850	52,600
Islands *	32 (307)	47 (1,689)	79 (1,996)

* Data are numbers (acres) of islands. The acreages of specific habitats on the islands were included above.

LIBBY HABITAT ENHANCEMENT PROJECT

This project was designed primarily to improve existing big game winter ranges on National Forest lands adjacent to Lake Koocanusa. Historically, the lower south and southwest facing slopes above the Kootenai River which provided big game winter range were open Ponderosa pine forests maintained by frequent wildfire. Between 1940 and 1977, 53 lightning fires were reported on the historic bighorn sheep winter range. Before the advent of effective fire suppression, these lightning caused fires would have continued to burn, halting normal plant succession and maintaining the open Ponderosa pine forest. These open forests with a grassland or shrubland understory provided the forage needed by wintering big game and also provided a unique and valuable habitat for a wide variety of adapted wildlife species.

The wildlife losses and mitigation goal, projects and schedule from Table 4 in the Fish and Wildlife Program (NPPC 1987) are as follows:

WILDLIFE OR HABITAT LOSS	MITIGATION GOAL, PROJECT/SCHEDULE
66 bighorn sheep, 3,190 acres of winter range, and 485 mule deer, 10,586 acres of winter/spring range. Thus far, treatment of 6,634 acres of winter range has been completed to help accomplish mitigation goals.	BPA shall fund projects to enhance and maintain winter/spring ranges on Kootenai National Forest lands adjacent to Lake Koocanusa to support target carrying capacities of an additional 66 sheep and 485 mule deer. Total number of acres to be treated will be established when the increase in carrying capacity for habitat enhancement is determined. An initial limit of 3,190 and 10,586 acres, respectively for bighorn sheep and mule deer, will be enhanced until increased carrying capacity is determined. Year 1, advance design. Years 2-10 implement and monitor.

This is a cooperative project between the Kootenai National Forest and Montana Fish, Wildlife & Parks (FWP). The Forest Service has primary responsibility for implementing individual enhancement projects. FWP's primary responsibility is to evaluate the effectiveness of the enhancement project. The evaluation portion of the project is designed to determine when the projected (33%) increase in carrying capacity is achieved and to guide future enhancement efforts. Site specific data will be used to determine the total number of acres of habitat which need to be improved to accomplish mitigation goals. Because these are cooperative projects, personnel from both agencies actively participate in all phases of project implementation.

HABITAT ENHANCEMENT

The FY94 work plan called for habitat enhancement activities on 4,621 acres. Accomplishments included interdisciplinary review, layout and cultural resources review on 1,498 acres of proposed treatment areas, 813 acres of slashing and 1,118 acres of prescribed burning (Table 2).

Table 2. Annual work plan accomplishments on the Libby Habitat Enhancement Project, FY94.

TASK	UNIT	NAME	ACRES	TREATMENT TYPE	ACTIVITY	LAYOUT	ACRES SLASH	BURN
3.19[1]	WC4	Warland Creek	80	Underburn	Burning			80
	WC5	Warland Creek	120	Slash/Burn	Burning			0
3.21	TM5	Tenmile Creek	100	Slash/Burn	Layout/Burn	100		100
3.8	AX8	Alexander Creek	129	Slash/Burn	Burning			129
4.12	F11	Fivemile Creek	100	Underburn	Burn			100
4.14	F10	Fivemile Creek	104	Underburn	Burn			104
5.2	CH19	Cripple Horse Cr	180	Slash/Burn	Slash		0	
5.3	BD1	Boulder Creek	303	Slash/Burn	Slash	303	0	
5.4	CB4	C Branch	235	Slash/Burn	Burn	235		235
5.5	STH2	Stone Hill	291	Slash/Burn	Slash		291	
5.7	CG14	Canoe Gulch	75	Underburn	Burn			60
6.13	LD14	Horse Range D5	370	Underburn	Layout	0		
6.4	R3	Rainy Creek	47	Underburn	Burning			0
6.5	R5	Rainy Creek	101	Underburn	Burning			95
6.6	AX5	Alexander Creek	70	Slash/Burn	Burn			0
6.7	CH14	Cripple Horse Cr	70	Slash/Burn	Burn			0
6.8	PL2	Phills Lake	218	Slash/Burn	Slash	218	218	
6.9	PL8	Phills Lake	100	Slash/Burn	Slash	100	0	
6.10	ROG1	Rocky Gulch	63	Slash/Burn	Slash		63	
6.11	TM1	Tenmile Creek	72	Slash/Burn	Layout	72	72	
6.12	SP1	Sutton/Peck	169	Slash/Burn	Layout/Slash	169	169	
6.15	WC1	Warland Creek	112	Underburn	Burn			112
7.1	WCT7	Warland Creek	170	Slash/Burn	Layout	0		
	WCT10	Warland Creek	190	Slash/Burn	Layout	190		
	WCT11	Warland Creek	111	Slash/Burn	Layout	111		
	WCT12	Warland Creek	282	Slash/Burn	Layout	0		
7.6	BC11	Big Creek	396	Slash/Burn	Slash		0	
	PC2	Parsnip Creek	103	Slash/Burn	Slash			103
7.9	CG1	Canoe Gulch	160	Underburn	Layout	0		
7.10	Z7	Ziegler Mtn	100	Underburn	Layout	0		
		Totals	4,621			1,498	813	1,118

1. Task numbers refer to the Kootenai River Wildlife Habitat Enhancement Project.

TIMBER HARVEST

Habitat enhancement activities occurred on one timber sale unit (Table 3). Most activities associated with proposed FY94 timber harvest units were deferred to FY95 due to the extreme fire season and associated fire control efforts. Timber sale activities are funded by the Kootenai National Forest as part of their ongoing timber sale program. Sale of timber or other forest products by the Kootenai National Forest contributes to the number of acres being treated at a substantially reduced, or zero cost to the Mitigation Trust Fund, thereby reducing overall mitigation costs.

Table 3. Summary of wildlife habitat enhancement activity in timber sale units included in the Long-term Enhancement Plan on Kootenai NF during FY94.

TASK	UNIT	LOCATION	SALE NAME	UNIT AREA	ACTIVITY
3.6	F33	Fivemile Creek	Mineral Sheep	44	unit 3 burning deferred*
			Mineral Sheep KV burn	287	KV burn deferred*
4.2	JC8	Jackson Creek	Fleetwood Jackson	24	unit 2 burning deferred*
4.3	F19	Fivemile Creek	Fivemile Helicopter	203	unit 2 burning deferred*
5.1	WCT3	Warland Creek	Ant Wildlife	21	harvest deferred*
	WCT5	Warland Creek	"	9	harvest deferred*
	WCT6	Warland Creek	"	13	harvest deferred*
6.1	TG1	Thomas Gulch	Wild Thomas Helicopter	15	**
	TG2	Thomas Gulch	"	13	**
	TG3	Thomas Gulch	"	4	**
	TG4	Thomas Gulch	"	26	**
6.3	ZV3	Ziegler View	Wild Jen	71	sale deferred*
6.8	**PL2**		**Phills Lake**	**137**	**logged**
7.1	WCT10	Warland Creek			layout deferred*
7.3	JC7	Jackson Creek	Back to Back Jack	73	recon deferred*
	LJ2	Jackson Creek	"	76	recon deferred*
7.5	CC8	Canyon Creek	Canyon Dots	12	recon deferred*
	CC9	Canyon Creek	"	13	recon deferred*
	CC10	Canyon Creek	"	15	recon deferred*
		TOTALS		137	

*Timber sale activities were deferred to FY95 due to both the extreme fire season and associated fire control priorities, and to other District timber priorities (deferred activities include sale, burning, harvest, layout, and field reconnaissance).

** The District has attempted to sell the Wild Thomas Helicopter Sale three times but it did not sell. Depending on the market, the District may try to resell it in the spring of 1995.

FY94 BUDGET AND EXPENSES

Actual costs of implementing the annual work plan for Libby habitat enhancement activities in fiscal year 1994 are listed in Table 4. Costs were estimated at $31.24 per acre but actual costs were $28.20 per acre. The difference between these two figures represents savings resulting from coordinating these activities with ongoing Forest Service programs. The total acreage treated or evaluated for treatment was less than planned. Extremely dry conditions early in the year limited timber harvest activities and ultimately wildfire suppression efforts reduced time spent on all other activities.

Table 4. Mitigation trust fund costs of implementing the annual work plan for Libby Habitat Enhancement, FY94.

ACTIVITY	ACRES PLANNED	ACRES TREATED	ESTIMATED COST	ACTUAL COST
Layout	3,175	1,498	$ 46,913	$29,355
Slashing	1,412	813	$ 53,000	$36,556
Burning	2,159	1,118	$ 78,417	$15,911
Subtotal			$ 178,330	$81,822
FS Overhead			$ 32,439	$14,883
TOTAL	6,746	3,429	$210,769	$96,705

1. Costs are estimates and may vary depending on site specific conditions.

MAJOR ACTIVITIES PLANNED FOR FY95

Work is planned on about 5,513 acres of wildlife habitat in FY95 (Tables 5 and 6). That total includes interdisciplinary team review and layout on 5,062 acres, 2,825 acres of slashing and 2,194 acres of prescribed burning.

Pre-treatment surveys of units scheduled for completion in FY95 and 96 will be conducted by the interdisciplinary team during FY95.

Table 5. List of tasks to be completed in FY95, Kootenai NF, from the Long-term Plan.

TASK	UNIT	NAME	ACRES	TREATMENT	LAYOUT	SLASH	BURN
3.12	GB8	Green Basin	329	Slash/Burn	329	329	
3.21	TM5	Tenmile Creek	100	Slash/Burn	100		100
4.5	F4	Fivemile	301	Slash/Burn	301	301	
4.6	F3	Fivemile	80	Slash/Burn	80	80	
5.2	CH19	Cripple Horse	180	Slash/Burn			180
5.3	BD1	Boulder Creek [1]	303	Timber Harvest	303	303	
5.4	CB4	C-Branch	117	Slash/Burn	117		117
5.5	STH2	Stone Hill	291	Slash/Burn	291		291
6.8	PL2	Phills Lake	130	Slash/Burn	130		130
6.9	PL8	Phills Lake	100	Slash/Burn	100	100	
6.10	ROG1	Rocky Gulch	63	Slash/Burn	63		63
6.11	TMI	Tenmile Creek	72	Slash/Burn	72		72
6.12	SP1	Sutton/Peck Creek	169	Slash/Burn	169		169
6.13	LD14	Horse Range	370	Underburn	370		
6.16	GB1	Green's Basin [1]	113	Underburn	113		113
6.4	R3	Rainy Creek	134	Burn			134
6.6	AX5	Alexander Cr.	70	Burn			70
7.1	WCT7	Warland Creek [1]	170	Timber Harvest	170	170	
	WCT12	Warland Creek [1]	282	Timber Harvest	282	282	
7.2	Y4	Young Creek	115	Slash/Burn	115	115	
7.4	CC11	Canyon Creek	56	Slash/Burn	56	56	
7.6	BC11	Big Creek	396	Slash/Burn	396	396	
7.7	PC2	Parsnip Creek	103	Slash/Burn	103		103
7.8	BP1	Big Creek	52	Slash/Burn	52	52	
7.9	CG1	Canoe Gulch	160	Underburn	160		160
7.10	Z7	Zeigler	100	Underburn	100		100
8.1	F6	Fivemile	191	Slash/Burn	191		
8.6	CB1	C-Branch	132	Slash/Burn	132	132	
8.7	SD1	Simons Draw	192	Slash/Burn	192	192	
8.8	BP4	Big Creek	54	Slash/Burn	54	54	
8.9	NFP1	N.Fk.Parsnip Cr.	129	Slash/Burn	129	129	
8.10	SNC1	Sutton Creek	67	Slash/Burn	67	67	
8.11	LD11	Horse Range	220	Underburn	220		220
8.13	CH23	Cripple Horse	105	Underburn	105		105
9.3	PC5	Parsnip Creek	67	Slash/Burn		67	67
		Totals	5,513		5,062	2,825	2,194

1. Timber sale opportunity was identified during preliminary IDT Review.

Table 6. Estimated mitigation trust fund costs of implementing the annual work plan for Libby Habitat Enhancement, FY95.

ACTIVITY	ACRES	D-1 COST	D-5,6 COST	TOTAL COST
Layout	5,062	$ 30,259	$ 20,030	$ 50,289
Slashing	2,825	$ 45,828	$ 4,700	$ 50,528
Burning	2,194	$ 36,398	$ 33,859	$ 70,257
Subtotal		$112,485	$ 58,589	$171,074
FS Overhead		$ 20,472	$ 10,663	$ 31,135
TOTAL	10,081	$132,957	$ 69,252	$202,209

1. Costs are estimates and may vary depending on site specific conditions.

HUNGRY HORSE HABITAT ENHANCEMENT PROJECT

This project was designed primarily to mitigate the loss of seral shrubfields used as elk winter range. It addresses the second highest priority mitigation project listed in the Wildlife and Wildlife Habitat Mitigation Plan for Hungry Horse (Bissell and Yde 1985). Other target species listed in the mitigation plan will also benefit, including: mule deer, black bear, grizzly bear, white-tailed deer, mountain lion, lynx and mountain grouse. A wide variety of small mammals and song birds which use shrubfields and forest openings should also benefit from the enhancement efforts.

The specific wildlife losses and mitigation goal, projects and schedule from Table 4 in the Council's Fish and Wildlife Program (NPPC 1987) are as follows:

WILDLIFE OR HABITAT LOSS	MITIGATION GOAL, PROJECT, SCHEDULE
133 elk, 6,650 acres of winter range. Thus far, treatment of 685 acres of winter range has been completed to accomplish mitigation goals.	BPA shall fund projects to enhance and maintain winter range on Flathead National Forest lands to support a target carrying capacity of an additional 133 elk. Total number of acres to be treated will be established when the increase in carrying capacity for habitat enhancement is determined. An initial limit of 6,650 acres will be enhanced until increased carrying capacity is determined. Year 1, advance design. Years 1-5 implement, test and monitor; report to Council for further action.

This is a cooperative project implemented by the Flathead National Forest and Montana Fish, Wildlife and Parks (FWP). The Forest Service has primary responsibility for implementing individual habitat projects while the FWP has primary responsibility to monitor and evaluate the effectiveness of the habitat enhancement work. Because this is a cooperative project, personnel from both agencies actively participate in all aspects of the project.

Activities during FY94 focused on implementing the habitat enhancement plan, evaluating vegetation and animal responses to treatment projects and continuing to gather baseline data on elk populations. The latter will ultimately provide the basis for evaluating success toward achieving the mitigation goal of increasing the elk carrying capacity by one-third.

HABITAT ENHANCEMENT

Habitat enhancement activities were planned on 839 acres and accomplished on 449 acres (Table 7). Primary activities this year were burning units that were previously logged or slashed. Seven units of the timber sale have been completed and 21 others will be burned next spring to bring them to completion. Three units of dense lodgepole pine were slashed to provide fuel beds for next year's burning. Work on the elk exclosure in Unit A was begun and was finished in October (FY95). The total expenditure for non-timber sale habitat enhancement activities covered by the Wildlife Mitigation Trust Account was $12,853 (Table 8). Most costs associated with wildlife mitigation efforts are covered by the Flathead National

Forest through their timber sale program, resulting in significantly reduced costs to the Trust Account for accomplishing mitigation goals.

Table 7. Habitat enhancement projects completed during FY94 as part of the Hungry Horse mitigation efforts of the Flathead National Forest.

			Treatment Acres		
Task	Unit	Location	Seed & Fertilize	Slash Trees	Burn
1.1	A	Spring Meadow Creek			11
1.16	F	Green Slope			12
1.28	21	Firefighter Mtn			12
1.29	22	Firefighter Mtn			14
1.34	27	Spring Meadow Creek		10	
1.36	29	Ada Creek		10	
1.39	34	Fire Creek			7
1.4	D	Firefighter Mtn			10
1.41	36	Firefighter Mtn			8
1.45	42	"			14
1.47	47	"			18
1.49	49	Ada Creek		12	
1.67	71	Spring Meadow Creek			11
	A&B	Cedar Ridge			300
TOTAL			0	32	417

Table 8. Trust fund costs associated with implementation of Hungry Horse elk habitat enhancement activities, FY94.

ACTIVITY	ACRES	COST	FS OVER-HEAD
Seed, & elk exclosure	10	$197	$44
Slash Trees	32	$5,241	$1,153
Burn	417	$5,097	$1,121
TOTALS	**459**	**$10,535**	**$2,318**

TIMBER SALE

The Firefighter - BPA timber sale was sold by sealed bid on October 21, 1992. Nineteen units totalling 262 acres were harvested in 1993. No timber harvest occurred during 1994 because the purchaser opted to delay the remaining units until 1995, the last year of the contract. However, harvest was completed on two units (53 & 55) which were begun in 1993. Units 61 and 82 (originally unit B) and eight other units are scheduled to be logged in 1995. Post and pole units were not offered for sale in FY94.

Thus far, 200 acres of natural openings on Firefighter Mountain have been burned. An additional 185 acres have been harvested and burned on Firefighter Mountain. These activities, along with the 300 acre Cedar Ridge burn brings the total treated acreage of Hungry Horse mitigation to 685 acres.

MAJOR ACTIVITIES PLANNED FOR FY95:

Habitat enhancement activities are planned on 35 units (742 acres), including 23 units (560 acres) of burning, 10 units (161 acres) of timber harvest, and 2 unit (21 acres) of forage seeding and construction of an elk exclosure (Table 9). The projected cost to implement the FY95 work plan is $11,578 (Table 10).

Table 9. List of tasks to be completed in FY95, Flathead NF, from the Long-term Plan.

TASK	UNIT	NAME	ACRES	TREATMENT	BURN	HAR-VEST	OTHER
1.1	A	Firefighter Mtn	11	Elk Exclosure			11
1.2	82	"	20	Timber Harvest		20	
1.3	83		19	Timber Harvest	19		
1.4	D	Firefighter Mtn	10	Forage Seeding			10
1.5	85		10	Timber Harvest	10		
1.15	2	"	15	Timber Harvest		15	
1.18	6	"	16	Timber Harvest		16	
1.20	10	"	16	Timber Harvest		16	
1.21	11	"	104	Burn	104		
1.22	12	"	16	Timber Harvest		16	
1.23	14	"	23	Timber Harvest		23	
1.24	15	"	6	Timber Harvest		6	
1.26	17	"	12	Timber Harvest		12	
1.27	18	"	20	Burn	20		
1.33	26	Fire Creek	26	Timber Harvest		26	
1.34	27	Spring Meadow Crk	14	Burn	14		
1.35	28	Spring Meadow Crk	15	Timber Harvest	15		
1.36	29	Ada Creek	10	Burn	10		
1.43	38	Firefire Mtn	15	Burn	15		
1.46	44	Meadow Creek	18	Timber Harvest	18		
1.48	48	Ada Creek	16	Timber Harvest	16		
1.49	49	Ada Creek	9	Burn	9		
1.50	50	Spring Meadow Crk	18	Timber Harvest	18		
1.53	53	"	15	Post/Pole	15		
1.54	54	Firefighter Mtn	20	Timber Harvest	20		
1.55	55	"	15	Post/Pole	15		
1.58	58	"	17	Timber Harvest	17		
1.59	60	"	2	Timber Harvest	2		
1.60	61	Spring Meadow Crk	11	Timber Harvest		11	
1.63	64	Firefighter Mtn	9	Timber Harvest	9		
1.64	66	"	11	Timber Harvest	11		
1.65	69	Spring Meadow Crk	11	Timber Harvest	11		
1.66	70	"	12	Timber Harvest	12		
	A	Hungry Horse Mnt	80	Prescribe Burn	80		80
	C	Cedar Ridge	100	Prescribe Burn	100		100
		Totals	742		560	161	21

Table 10. Estimated and actual costs to the wildlife mitigation trust fund of implementing the annual work plan for the Hungry Horse mitigation activities by the Flathead National Forest.

Budget Category	FY94 (Planned)	FY94 (Actual)	FY95 (Planned)
EXCLOSURE, SEED, FERTILIZE	$3,011	$197	$1,925
SLASH	$5,918	$4,852	$0
BURN	$7,776	$5,241	$7,565
sub-total	$16,705	$10,290	$9,490
FS OVERHEAD	$3,675	$2,264	$2,088
TOTAL	**20,380**	**$12,554**	**$11,578**

HABITAT PROTECTION PROJECT:

This project was designed primarily to protect riparian, wetland, palouse prairie, and mature/old growth forest habitats. It addresses the first, fourth and sixth priorities listed in the Hungry Horse Mitigation Plan (Bissell and Yde 1985) and the fourth, fifth and seventh priorities listed in the Libby mitigation plan (Mundinger and Yde 1985).

The habitats featured in this project are considered high priority since many of the associated wildlife species are designated as Threatened or Endangered, Sensitive or Species of Special Concern or are the object of nationwide protection and restoration programs. This project benefits a wide variety of the species affected by hydroelectric development, including: black and grizzly bears, waterfowl, Columbian sharp-tailed grouse, terrestrial furbearers, numerous small mammals and birds associated with palouse prairie, riparian and old growth habitats, mule deer, elk, white-tailed deer, mountain lion, mountain grouse, aquatic furbearers, bald eagle and osprey.

The wildlife and habitat losses and mitigation goal, projects and schedule from Table 4 of the NWPPC Fish and Wildlife Program (1987) are as follows:

WILDLIFE OR HABITAT LOSS	MITIGATION GOAL, PROJECTS, SCHEDULE
Columbian sharp-tailed grouse: 2,462 acres. Thus far, no acres of Palouse prairie habitat have been protected.	BPA shall fund projects to protect 2,462 acres of prairie habitat within the vicinity of the Tobacco Plains. Year 1-2, advanced design. Years 3-10, acquire easements.
Waterfowl: 4,564 acres of prime habitat. Thus far, no acres of wetlands have been protected or enhanced.	BPA shall fund projects to protect and/or enhance 4,564 acres of prime wetlands in the Flathead Valley. Years 1-2, advanced design. Years 3-10, upon completion of design, implemerit projects.
Grizzly Bears: 2-4 animals,8,590 acres of critical habitat, and Black Bears: 27-34 animals, 8,590 acres of critical habitat. Thus far, 619 acres of black and grizzly bear habitat have been protected.	BPA shall fund projects to protect 8,590 acres of riparian habitat and travel corridors through the acquisition of conservation easements. Years 1-2, advanced design; interagency coordination; prioritizing sites; appraisals. Upon completion, acquire easements.
Terrestrial Furbearers: 11,050 acres of old growth forest stands. Thus far, no acres of old growth forest habitat have been protected.	Bonneville shall negotiate cooperative agreements with state and federal agencies and private landholders to protect 11,050 acres of selected old growth forest stands. Years 1-2, advanced design; report to council for further action.

This project is being implemented by Montana Fish, Wildlife & Parks (FWP) with the aid of Technical Committees in each area of emphasis and an overall Habitat Protection Committee (HPC). The technical committees are teams of biologists representing agencies or private conservation groups which have expertise and/or management authority over the particular species or group. These committees meet on an ad-hoc basis and assist in refining the overall goals and objectives of the project as well as evaluating specific implementation proposals. In addition, these committees include potential cooperators who may be able to contribute financially or otherwise to accomplishing the mitigation goals.

The HPC includes individuals representing a broad spectrum of agencies or groups likely to be affected by implementation of habitat protection projects. This group provides a first-line public involvement forum. The social and political bounds of the decision space are refined in this forum. Specific habitat protection proposals are brought before this group which discusses the broader ramifications of the project. The HPC confirms a project is consistent with the mitigation program and may recommend that FWP accept, reject or modify the project proposal. Recommendations from this group are carried forward to the Wildlife Mitigation Advisory Committee for their input. After considering the input of the WMAC, FWP makes the final decision on whether or not to proceed with a project.

MAJOR ACTIVITIES ACCOMPLISHED DURING FY94

PALOUSE PRAIRIE HABITAT

Two ongoing projects were continued during FY94: the Department of State Lands (DSL) Lease and The Montana Nature Conservancy (TNC) Easement Project.

1. DSL LEASE

On June 24, 1993, FWP applied to lease approximately 503 acres of State Land in Section 16, Township 37 North, Range 27 West. The habitat could be enhanced and managed to provide suitable habitat for Columbian Sharp-tailed grouse and other palouse prairie dependent species. This tract could add to a complex of habitats managed for palouse prairie habitat values by the Kootenai National Forest, The Nature Conservany and FWP. Issues regarding lease fee, potential for home and cabin development on this tract, timber management, and livestock grazing were discussed with personnel from Department of State Lands but no lease agreement has been reached. FWP must now re-evaluate the potential value of this tract to grouse and determine how best to proceed to achieve mitigation goals.

2. TNC EASEMENT

In September 1990, The Nature Conservancy formally asked FWP to cost share the acquisition of 680 acres of palouse prairie habitat in the Tobacco Plains. This tract included the last known Columbian sharp-tailed grouse dancing ground in Montana and the largest known population of Spalding's catchfly. FWP and TNC personnel met in April 1993 and agreed to investigate the feasibility of the department purchasing a conservation easement from TNCto protect sharp-tailed grouse habitat values. In November 1993, the Wildlife Mitigation Advisory Committee supported a department recommendation to proceed with the conservation easement once a value is determined with an easement appraisal. The appraisal was completed April 12, 1994, after which TNC and FWP began negotiations on price of the easement.

WETLANDS / RIPARIAN HABITAT

HABITAT ENHANCEMENT PROPOSALS

Several wetland habitat enhancement sites were visited this year. However, the department decided to focus efforts on completion of the Wetland / Riparian Habitat Mitigation Implementation Plan rather than diverting limited personnel resources to project reviews.

WETLAND/RIPARIAN HABITAT MITIGATION IMPLEMENTATION PLAN

In August 1993, the department initiated efforts to write a Wetland / Riparian Habitat Mitigation Implementation Plan. The plan is intended to provide guidance for selecting and implementing habitat protection projects. Five public meetings were held to receive input on issues surrounding wetland and riparian protection and to review the draft EIS. Alternatives were developed from this initial public input and three additional public meetings were held in Libby, Eureka and Kalispell in January 1994 to provide an opportunity for interested parties to review the range of alternatives. A draft EIS was developed and released for public comment on April 26, 1994. The public was provided additional opportunities to comment on the draft EIS at three public hearings and in writing through June 6, 1994, resulting in comments and suggestions from 49 individuals and organizations.

MAJOR ACTIVITIES PLANNED FOR FY95:

On February 27, 1995, the department filled the Habitat Protection Biologist position which is responsible for review and implementation of habitat protection projects. This should facilitate completion of projects in FY95. Major activities planned for FY95 are listed below. The projected budget for the Habitat Protection Project is presented in Table 11.

1. Finalize the environmental impact statement and complete the Wetland / Riparian Habitat Mitigation Implementation Plan.

2. Negotiate and purchase a conservation easement from The Nature Conservancy to protect Columbian sharp-tailed grouse habitat in the Tobacco Plains.

3. Review and consider proposals for cooperative wetland habitat projects with land management agencies.

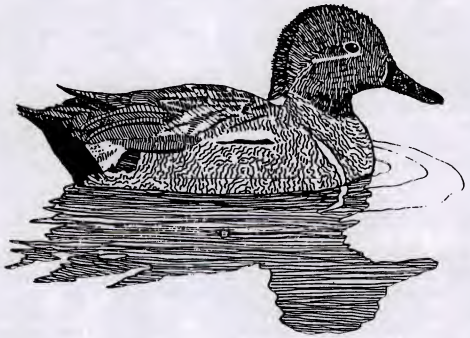
4. Implement selected portions of the Columbian Sharp-tailed Grouse Mitigation Implementation Plan. Continue to identify and develop opportunities for projects to enhance palouse prairie habitats in the Tobacco Plains.

5. Develop habitat protection project proposals. Projects may include palouse prairie, wetland, or riparian habitat acquisition / protection.

Table 11. Budget summary for Habitat Protection Project, FY94 and 95.

Budget Category	FY94 (Planned)	FY94 (Actual)	FY95
PERSONAL SERVICES	$44,359	$25,366	$31,735
OPERATIONS AND MAINTENANCE	$7,800 [1]	$5,522	$57,800
EQUIPMENT	$0	$0	$0
sub-total	$52,159	$30,888	$89,535
DEPARTMENT OVERHEAD	$5,737	$3,398	$9,849
TOTAL	**$57,896**	**$34,286**	**$99,384**

[1] The $57,800 in FY95 includes $52,000 budgeted for contracting project work such as engineering design, feasibility studies, appraisals, etc. which was not included in the FY94 budget.



LIBBY MULE DEER AND BIGHORN SHEEP MONITORING PROJECT

This project was designed to monitor the response of mule deer and bighorn sheep populations to ongoing habitat enhancement work on big game winter ranges on National Forest lands adjacent to Lake Koocanusa. Wildlife losses and mitigation goals for this project from Table 4 in the Fish and Wildlife Program (NPPC 1987) were discussed earlier in the section titled Libby Habitat Enhancement Project.

During FY92, a decision was made to reduce the monitoring and evaluation effort at the Libby project area. Since then, the Hungry Horse monitoring and evaluation program has been expected to provide information which can also be used to evaluate the success of the Libby project.

1994 TRAPPING SEASON

A concerted effort to capture and mark mule deer and bighorn sheep was conducted from 14 December 1993 until 25 February 1994. A trapline of 21 Clover traps was established along an 8 mile section of winter range between Tenmile Creek and Rocky Gorge (Schmidt and Wenum 1994). A total of 639 trap nights was recorded. Traps were tripped 210 times resulting in the capture of 191 animals, including 187 mule deer and 4 bighorn sheep. Overall success rate was 91%.

All captured mule deer and bighorn sheep were marked with orange ear streamers affixed to each ear using numbered Fearing ear tags. All neckbands, nonfunctional radio collars and other non-essential marking devices from previous capture events were removed. Fifty-two previously unmarked deer were captured and neckbanded, 60 with existing markers received new markers, 68 marked deer were captured and released without handling, 3 resulted in mortalities and 4 escaped. Of the 60 marked deer that received new markers, blue and yellow ear streamers were removed from 50 and 4 animals, respectively, red roto-tags were removed from 2, and 4 neckbands or non-functioning radio collars were removed from deer. MAID #311 suffered a broken left shoulder and was dispatched. MAID #177 and an unmarked mule deer were killed in the trap by a mountain lion. Three bighorn ewes were given new marks and 1 marked ewe received a new marker.

POPULATION SURVEYS

A total coverage survey of the winter range from Fivemile Creek to Stonehill was conducted on 15 December 1994. Only 25 mule deer were observed so a reasonable estimate could not be made of the mule deer population. Snow cover was light and deer were widely dispersed which reduced their visibility. The bighorn sheep survey was conducted concurrently with the mule deer survey. The sample of 42 sheep consisted of 22 ewes, 6 lambs and 14 rams for lamb:ewe and ram:ewe ratios of 27:100 and 64:100, respectively. Four population estimates were calculated according to the number of active radios believed

to be in the sampling area, number of yellow ear streamers, number of blue ear streamers and a combination of all three marks. Sheep population estimates for each of the categories delineated above were 66, 65, 125 and 101, respectively.

One hundred-six mule deer were observed and classified during a helicopter survey of the core winter range on 15 December 1994. The population size was estimated at 507 mule deer based on the observation of 3 of 18 active radio collars. Thirty-five sheep were observed during the same helicopter survey. The population was estimated at 89 based on the sighting of 1 out of 4 sheep fitted with orange ear streamers.

AERIAL RELOCATION SURVEYS

Relocation flights were conducted on a monthly basis when weather conditions allowed. Distributions and movements of instrumented animals were very similar to previous years.

MAJOR ACTIVITIES PLANNED FOR FY95

In FY95, the project will continue monitoring of mule deer and bighorn sheep. Efforts this year will focus on compilation and evaluation of all the monitoring data collected in this and previous years. The extent of future monitoring efforts will be based on recommendations in that evaluation. A budget summary for fiscal years 94 and 95 is in Table 12. The major activities planned for FY95 are listed below:

1. Complete a report summarizing results of population and distribution surveys and other monitoring efforts from past years.

2. Relocate radio-collared animals monthly to determine movements, distribution and habitat use to provide data which will be used to evaluate the effectiveness of various habitat improvement activities.

3. Conduct early- and late-winter helicopter surveys to determine population size and composition.

4. Maintain current data files and analyze data to document effects of habitat improvement projects on bighorn sheep and mule deer populations.

Table 12. Budget summary for Mule Deer Monitoring Project, FY94 and 95.

Budget Category	FY94 (Planned)	FY94 (Actual)	FY95 (Planned)
PERSONAL SERVICES	$12,347	$12,287	$31,681
OPERATIONS AND MAINTENANCE	$24,300	$12,049	$12,000
EQUIPMENT	$0	$0	$3,000
Sub-total	$36,647	$24,336	$46,681
DEPARTMENT OVERHEAD	$4,031	$2,677	$4,805
TOTAL	**$40,678**	**$27,013**	**$51,486**

HUNGRY HORSE ELK MONITORING PROJECT

This project was designed to monitor the response of elk to ongoing habitat enhancement work designed to mitigate for the loss of seral shrubfields used as elk winter range that resulted from filling Hungry Horse Reservoir. Work is being conducted on big game winter ranges on National Forest lands adjacent to Hungry Horse reservoir. Wildlife losses and mitigation goals for this project from Table 4 in the Fish and Wildlife Program (NPPC 1987) were discussed previously in the Hungry Horse Habitat Enhancement section.

POPULATION MONITORING

A marked sample of approximately 45 elk has been used to monitor the wintering elk population at Firefighter. The 1993-94 population estimate was 139 + 42. Efforts continued to develop a sightability model for estimating population size and to monitor trend. Differences among observers and overall low sightability have resulted in large differences in estimated population size. Development of an effective sightability model would substantially reduce costs of monitoring elk population trends.

Herd composition consisted of 37 calves:100 cows and 14 bulls:100 cows in spring 1994. Summer and fall ratios were 32 calves:100 cows:15 bulls. An estimated 64% of the reproductive-aged cows successfully raised calves to 6 months of age. Small sample sizes make it difficult to generate precise estimates of calf recruitment rates as measured by calf:100 cow ratios. Large differences in estimates were recorded using different methods of monitoring. Calf recruitment rates are an important measure of the success of habitat enhancement efforts and thus these discrepancies are cause for concern.

Among 45 marked elk monitored in the Firefighter area only 2% died during the year. All deaths were associated with hunter harvest.

Data collection and analysis for the Spotted Bear winter range continued to be deemphasized as Firefighter received the focus of enhancement efforts, and therefore, was the focus of monitoring and evaluation efforts. The winter elk population at Spotted Bear was estimated at 513 + 304. This is considerably smaller than previous estimates because different estimation techniques were used.

HABITAT MONITORING

Indices of habitat use based on pellet group data continued to show heavy use of natural openings as compared to forested habitats. Use of proposed enhancement sites (timber sale units) averaged well below random forested sites based on pellet group data.

Vegetation monitoring efforts focused on those areas treated at Firefighter during 1991 and 1992. Browse utilization transect data indicated preferred browse species were generally in poor condition in natural openings used by elk, and are present as only a minor

component of the shrub layer in timbered sites scheduled for treatment. Serviceberry, willow, redstem ceanothus, maple and rose continue to be preferred species where available. Preliminary analysis of vegetation response to treatment (slashing and burning) in 3 natural openings showed that the relative abundance of plants did not change, although growth of serviceberry plants increased an average of 151 mm (6.0 inches) compared to untreated sites.

FOOD HABITS AND DIET QUALITY

Samples of elk feces were sent to the habitat laboratory at Washington State University in Pullman for evaluation of diet composition and quality. Investigation of elk food habits by microhistological analysis of feces showed that pacific yew and Oregon grape were the most common winter food items eaten at Firefighter; Douglas-fir and western larch were most common at Spotted Bear. Browse transects indicate that willow, redstem ceanothus and rose are favorite food items. Apparently, the latter species are preferred when they are available, but pacific yew, Oregon grape, Douglas fir and western larch make up the bulk of an elk's winter diet in the primarily forested areas of this winter range.

Urine samples were collected in snow and analyzed for urea nitrogen:creatinine ratios, a measure of physical condition of the wintering elk population. Urea nitrogen:creatinine ratios fell within ranges found in other elk herds. Assessment of these technique for monitoring elk response to habitat enhancement will continue. Detailed results of monitoring efforts are more fully reported in Vore et al. (In preparation).

MAJOR ACTIVITIES PLANNED FOR FY95

Monitoring and evaluation activities will be continued as in recent years. A concentrated effort will be directed toward increasing the number of marked elk at both Firefighter and Spotted Bear in FY95. Additional marked elk are needed to improve estimates of population size, herd productivity and sightability. Specific major tasks to be completed are listed below and projected costs of the program are given in Table 13.

1. Trap and mark to maintain representative samples of elk at Firefighter and Spotted Bear winter ranges.

2. Relocate radio collared elk every two weeks to determine movements, distribution and habitat use to provide data which will be used to evaluate the effectiveness of various habitat improvement activities.

3. Conduct paired fixed-wing and helicopter surveys to determine population size and composition.

4. During winter, make bi-weekly collection of elk feces and urine in snow to evaluate food habits and nutrition.

5. Complete 40-50 pellet group surveys to monitor elk distribution and habitat use relative to enhancement sites.

6. Conduct ECODATA plots in a representative sample of treatment and control areas to determine vegetation response to habitat improvement activities.

7. Coordinate implementation of work plans, budgets and habitat improvement projects with Forest Service personnel.

8. Maintain current data files and analyze data to document effects of habitat improvement projects on elk and vegetation.

9. Initiate planning for elk winter range enhancement projects on other Ranger Districts of the Flathead National Forest as opportunities arise.

Table 13. Budget summary for Hungry Horse Elk Monitoring Project, FY94 and 95.

Budget Category	FY94 (Planned)	FY94 (Actual)	FY95 (Planned)
PERSONAL SERVICES	$75,545	$62,417	$66,101
OPERATIONS AND MAINTENANCE	$27,400	$32,578	$22,700
EQUIPMENT	$0	$0	$0
Sub-total	$102,945	$94,995	$88,801
DEPARTMENT OVERHEAD	$11,324	$10,449	$9,768
TOTAL	**$114,269**	**$105,444**	**$98,569**

NONGAME WILDLIFE MONITORING PROJECT

This project was designed to monitor the effects of ongoing habitat enhancement work at Hungry Horse and Libby on breeding bird communities and to determine whether enhancement prescriptions effectively restore wildlife habitat. This project reflects growing concern in the wildlife community for the status and trend of certain neotropical migrant songbirds.

The Nongame Wildlife Monitoring Project does not address a specific wildlife loss, mitigation goal, or project listed in Table 4 of the Council's 1987 Fish and Wildlife Program. Rather, it addresses a need for additional monitoring of the habitat enhancement projects. Nongame birds are widely recognized as one of the best indicators of habitat quality, and inhabited all of the habitats lost in the project areas. This project was discussed at Wildlife Mitigation Advisory Committee meetings in 1991, 1992 and 1993. In March 1993, the department issued its decision to implement the project.

BIRD SURVEYS

Our final 1994 sample size at Firefighter was 102 monitoring points. These included sites permanently marked during previous habitat monitoring as well as additional control and treatment sites. We sampled 91 of the 101 points sampled in 1993. The 1994 sample included 41 random and paired control sites and 61 points in habitat treatment units, including 39 in which enhancement has been initiated. Most (77%) were in units selected for timber harvest. Twenty points were in units cut during late summer/fall 1993, which have not yet been burned. Three had been burned immediately prior to the breeding season, 8 had been cut and burned 1-3 years earlier, and 20 had yet to be cut. Sample sizes were very comparable to 1993.

Data collected from these sites will allow comparisons of breeding bird communities before and after treatment, between treatment types, and between treated and untreated (control) sites within particular cover types. We have also initiated time-series analysis of bird communities to look at the timing of species-specific responses to habitat change. We now have 83 data points (1 point/1 year/all replicates) describing control sites, 4 from browse slashing units, 6 from prescribed burns in natural openings, 7 from slash/burn units, and 101 from timber harvest units. For the timber sale units, we now have 55 pre-harvest samples, 24 samples from the first year after harvest but before burning, and 14 samples varying from 2-8 years post-harvest (1-6 years following burning).

Our final sample size at Libby was 113 of the 115 monitoring points established in 1993. We surveyed points in most of the treatment units identified in the long-term plan for the Libby project area, including 48 timber harvest units, 39 slash and burn units, and 16 prescribed underburn sites. The sample was well distributed between pre- and post-treatment enhancement sites.

We conducted 4 replicate 10-minute point counts at each monitoring site. All counts were conducted during the period 23 May - 22 July, with replicate counts staggered at about 10-day intervals. A total of 67 bird species were recorded during the 408 point counts in the Firefighter project area; 91 bird species were recorded during 446 point counts in the Libby project area. Analysis of distribution, frequency of occurrence, and relative abundance of these species by treatment type and project area is ongoing.

HABITAT SAMPLING

We again used the habitat sampling scheme developed by Hutto to document cover type and habitat features at each of the points where bird counts were conducted. Variables measured or estimated included the number of trees by size class, canopy cover of trees, shrubs and herbaceous vegetation, snag density, and the presence/absence of riparian habitat or edge. Systematic photo-documentation work was done at a subset of sites in each project area. These data will compliment those collected during big game monitoring efforts, to facilitate more comprehensive enhancement planning.

DATA MANAGEMENT

All field forms were proofed by the project biologist and technicians immediately following the field season. The initial focus following the field season was compilation of the U.S. Forest Service monitoring transect data, which were transmitted to the Regional Forest Service office in Missoula in late September. We then began entering all data from the two enhancement monitoring project areas.

All data compilation and analysis is being conducted using standardized techniques. We coordinated the structure of computer files with other researchers in western Montana to ensure compatibility and to provide for larger samples in the analysis of bird distribution and habitat relationships. Our 1,834 point counts conducted in 1994 generated over 19,000 bird records, and data proofing and cleanup is ongoing. Proper assignment of all bird data to habitat types and enhancement status is essential before any detailed quantitative analyses of response to habitat treatment are performed. Cursory analysis is being performed based on our first two years of data, and will be included in Casey (1995). Subsequent reports will include progressively more detailed and accurate data summaries as data files are updated, corrected and analyzed.

RESPONSE TO TREATMENT

Preliminary analysis of the field data indicates a strong relationship between the presence of snags and the number of species present (species richness) in treatment units at Firefighter. Recent treatments at Libby seem to provide for the habitat needs of early post-fire bird species; Black-backed woodpeckers, for example, were found in one unit on the Rexford District where live ponderosa pines were blackened by fire. Fire dependent,

cavity-nesting species apparently play a major role in recolonization of recently harvested stands at Firefighter. Northern flicker and mountain bluebird invaded over 80% of harvest units during the first season following overstory removal. Predictably, two forest interior species, Swainson's thrush and Tounsend's warbler were lost at over 80% of these same sites.

Data compiled at paired treatment and control points on Hungry Horse Mountain, where 3 (non-BPA) seed tree cuts were harvested in 1991, were used to gain insight into species turnover and timing of response. Seven species including northern goshawk, golden-crowned kinglet, varied thrush and Townsend's Warbler, were seen at control points only. Four species were seen only in the treatments; an unidentified hummingbird, mountain bluebird, Townsend's solitaire, and lazuli bunting. The latter species was not recorded in the treatments until 1994, two years after burning, apparently in response to increased shrub growth.

Eight species which were present both years at control points also apparently rebounded in response to vegetative growth in the controls during the second year. These included the MacGillivray's warbler, a neotropical migrant which, like the bunting, is dependent on shrubs as nesting strata. Species richness, which averaged 20 for the control points over the two years, also rebounded from only 7 species recorded in treatment units in 1993 to 20 species recorded during 1994, the second year following burning.

Similar analysis of species presence patterns, coupled with analysis of frequency and relative abundance indices, is underway for larger sets of treatments and controls throughout the Firefighter Mountain project area. Most comparative analysis from the Libby project area is based on differences in the type of, and time since, enhancement. Pre-treatment data will serve as control data in both project areas, but more so at Libby.

MAJOR ACTIVITIES PLANNED FOR FY95

Activities in FY95 will focus on continuing replicated point counts at a representative sample of treatment and paired control points. These will include most of the sites used in FY94 as well as additional sites included to represent habitat or treatment types or their controls not adequately represented in FY94. A budget summary for Fiscal years 1994 and 1995 is given in Table 14. The major activities planned for FY95 include:

1. Conduct breeding bird surveys in a representative sample of treatment and control areas on the Koocanusa and Flathead project areas.

2. Initiate snag density/attrition surveys at key monitoring sites.

3. Determine the key habitat features which are correlated with key bird species presence and abundance.

4. Compile and analyze point count and habitat data.

5. Survey additional WMA's and State Parks and update associated databases to assist department managers in developing habitat enhancement and watchable wildlife interpretive opportunities and materials.

6. Continue and expand habitat sampling efforts in 1995.

Table 14. Budget summary for Nongame Wildlife Monitoring Project, FY94 and 95.

Budget Category	FY94 (Planned)	FY94 (Actual)	FY95
PERSONAL SERVICES	$58,783	$56,802	$57,000
OPERATIONS	$11,300	$14,507	$13,300
EQUIPMENT	$3,000	$2,299	$0
sub-total	$73,083	$73,608	$70,300
DEPARTMENT OVERHEAD	$7,709	$7,844	$7,733
TOTAL	**$80,792**	**$81,452**	**$78,033**

FINANCIAL SUMMARY JULY 1993 THROUGH SEPTEMBER 1994

This report summarizes financial activity in the Trust Account and the Wildlife Mitigation Program during the period, July 1, 1993 to September 30, 1994. This period was selected because activities, and therefore expenses, for habitat enhancement activities completed by the US Forest Service are reported for the Federal fiscal year.

FUND BALANCE

The balance of funds in the Fish and Wildlife Mitigation Trust Account as of September 30, 1994 was $10,770,300 (Table 15). The total included $10,000,000 principal, $458,075 balance of funds from the Habitat Protection Grant, and $271,415 in unexpended earnings.

PAYMENTS

During FY94, we received the scheduled annual payment of $2,000,000 in December 1993. This payment increased the principal to $10,000,000.

REVENUE

Total revenue into the Trust Account during the report period was $548,146 (Table 16). Average yield from investments increased from 4.91% in September 1993 to 5.42% in September 1994 (Table 17). Increasing yields have resulted from slightly higher interest rates and a request by FWP to the Montana Board of Investments in FY93 to review the investment strategy for the Trust Account in an effort to increase earnings.

EXPENDITURES

Expenditures for the report period totalled $388,194 which included personal services $194,341, operating expenses $189,491 and equipment purchases $4,362 (Table 18).

MONTANA DEPARTMENT OF FISH, WILDLIFE AND PARKS
SCHEDULE OF ASSETS, LIABILITIES AND FUND BALANCE
BPA WILDLIFE MITIGATION TRUST FUND
September 30, 1994

ASSETS		
Cash in Treasury	$17,109	
STIP Purchased Interest	$0	
Interest Receivable	$58,374	
Long Term Security Premium	$19,662	
L/T Federal Securities at Par	$0	
L/T Corporate Securities at Par	$7,217,355	
Short-term Investment Pool (STIP)	$3,465,427	
TOTAL ASSETS	$10,777,927	
LIABILITIES		
L/T Security Discount	$7,617	
Accountability for Prop. Held in Trust	$10	
TOTAL LIABILITIES	$7,627	
FUND BALANCE (Assets - Liabilities)		$10,770,300
FUND BALANCE		
Fund Balance - Unreserved principal	$10,000,000	
Fund Balance - Unexpended earnings	$271,415	
Grant Balance - Unexpended Revenue	$458,075	
REVENUE (FY94 to date)		
Budgeted Revenue	$98,678	
Annual Payment	$0	
TOTAL REVENUE	$98,678	
EXPENDITURES		
Budgeted Expenditures	$49,148	
Prior Year Expend/Deductions Adj	$109	
Non-Budgeted Prior Year Transfers Out	$8,611	
TOTAL EXPENDITURES	$57,868	
FUND BALANCE		$10,770,300

Table 15. Schedule of assets and liabilities and fund balance for the Trust Account.

MONTANA DEPARTMENT OF FISH, WILDLIFE AND PARKS
SCHEDULE OF REVENUE
BPA WILDLIFE MITIGATION TRUST FUND

July 1, 1993 - September 30, 1994

REVENUE		
U.S. Treasury Notes	$416,658	
STIP Interest	$113,653	
Security Profit on Sales	$17,481	
Amortization Bond Discounts	$3,507	
Lending Income (Long Term)	$2,815	
Interest earnings (misc)	$(89)	
Security Loss on Sales	$(4,454)	
Amortization Bond Premium	($350)	
Administrative Cost Transfer	($1,075)	
TOTAL REVENUE		$548,146

Table 16. Income from all investments in the Wildlife Mitigation Trust Account.

Maturity Date	Settlement Date	Investment	Par Value	Coupon Rate	FY95 * Revenue
7-17-95	8-1-94	Saloman, Inc.	$500,000	5.250%	$26,250
11-15-95	11-16-92	U. S. Treasury Note	$500,000	5.125%	$25,625
1-22-96	1-22-93	Federal Home Loan Bank	$500,000	5.000%	$25,000
3-31-96	3-31-94	U. S. Treasury Notes	$300,000	5.125%	$15,375
5-15-96	5-21-93	U. S. Treasury Notes	$500,000	4.250%	$21,250
6-1-96	6-3-93	Smith Barney Holdings	$200,000	5.375%	$10,750
7-31-96	10-31-94	U. S. Treasury Notes	$500,000	6.125%	$30,625
9-3-96	9-2-93	John Hancock Capitol Corp Mln PP	$500,000	4.600%	$23,000
11-15-96	11-15-93	U. S. Treasury Notes	$200,000	4.375%	$ 8,750
11-20-96	5-11-93	Securitized Triple A Receivables	$300,000	5.232%	$15,696
3-15-97	4-14-92	Fina: GECC	$300,000	6.200%	$18,600
4-10-97	4-10-92	Federal Home Loan Bank	$500,000	5.670%	$28,350
4-21-97	7-21-92	Student Loan Marketing Assn.	$500,000	5.120%	$25,600
5-15-97	5-16-94	U. S. Treasury Notes	$500,000	6.500%	$32,500
9-29-97	1-29-93	Federal Home Loan Bank	$500,000	5.000%	$25,000
9-29-97	1-29-93	U. S. Treasury Notes	$500,000	6.000%	$30,000
5-15-98	5-12-93	Nellie Mae, Inc.	$217,355	4.962%	$10,785
5-15-99	8-15-94	U. S. Treasury Notes	$200,000	9.125%	$18,250
		Total/Average	$7,217,355	5.423%	$391,406

* Interest is received every 6 months from maturity date. Revenue is based on coupon rate times par value.

Table 17. List of long-term investments held for the Mitigation Trust Account September 30, 1994.

MONTANA DEPARTMENT OF FISH, WILDLIFE AND PARKS
SCHEDULE OF EXPENDITURES
BPA WILDLIFE MITIGATION TRUST FUND

July 1, 1993 - September 30, 1994

PERSONAL SERVICES			
Salaries	$9,801		
Hourly Wages	$145,569		
Employee Benefits	$38,971		
Total Personal Services		$194,341	
OPERATING EXPENSES			
Contracted Services	$122,304		
Supplies and Materials	$11,680		
Communications	$2,958		
Travel	$21,195		
Rent	$24,127		
Utilities	$857		
Repairs and Maintenance	$2,603		
Other	$3,767		
Total Operating Expenses		$189,491	
EQUIPMENT	$4,362	$4,362	
TOTAL EXPENDITURES			$388,194

Table 18. Schedule of expenditures in the Wildlife Mitigation Trust Account.

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